



**EXPERIMENTER**  
FEATURE



BY BUDD DAVISSON









**I**t is a well-known fact that the work habits of some of us within the homebuilding community leave much to be desired. Those of us who fall in that category don't like to admit it, but we seem to meander through projects with no clear direction.

Often, you'll find us working on parts just because we happen to like those parts better than those that fit into a well-defined, logical plan. We know we should be more organized and schedule activities better, but we often don't. Our brains just don't seem to work that way. This is made much worse by the irritating way in which life keeps getting in our way. The "must do" tasks seem to get in the way of the "wanna do" ones, so it's hard to concentrate on a given direction. This is a fairly common problem, so the question has to be asked whether there is a way to put builders like us back on the straight and narrow.

The answer to the above, which may surprise some, is that no, there is no quick cure for those of us who can't work in a straight line. We are who we are and have a hard time fighting what seem to be random work habits. However, a few simple tricks seem to be effective in helping our organization and scheduling while encouraging progress.

#### IS SKIPPING AROUND FATAL?

**MOST SERIOUS BUILDERS** will comment that the tendency to skip around (weld on the fuselage for a while and then stop and build ribs, work on engine installation and stop to fit the tail wheel, etc.) is death to a project. It won't actually kill a project, but it certainly isn't as productive as attacking each individual component and seeing it through to the end. Adapting an assembly line mentality in which similar items, like ribs or tabs, are all cranked out at one time is the logical way to form parts, but doing them only when we feel like it isn't going to put a stake through the project's heart.



#### BLUE-TAPE NOTES

**SINCE MOST OF US** can't actually schedule or control the time that can be devoted to our projects, it's easy for us to forget where we were the last time we worked on it. Where were we in making the flap widget? Or was it the engine mount gizmo? The cure is to either write down what needs to be done next in a logbook or, for those of us who are visually oriented, stick blue masking tape notes that clearly say what has to be done next to anything that's unfinished. When applying this technique to an unstructured approach to building, it's not unusual for the project to be nearly covered with blue tape. The good news, however, is that when there are no more blue notes, the airplane is finished.



### THE HALF-HOUR LIST APPROACH

**THE MOTIVATIONAL EFFECT** of small victories absolutely cannot be underestimated. Every time something positive is done on the project, no matter how small, a little spark of satisfaction courses through us. Nothing is more encouraging than progress, and progress is easily accomplished in the half-hour approach to building.

## NOTHING IS MORE ENCOURAGING THAN PROGRESS, AND PROGRESS IS EASILY ACCOMPLISHED IN THE HALF-HOUR APPROACH TO BUILDING.

When it comes to motivating builders and helping them schedule, nothing is better than mentally breaking the project down to half-hour, easily completed parcels. *Note: Easily completed parcels.* We should sit down and make a list of every single one of the actions we need to take to complete a component or assembly. When doing that, estimate how long it will take to accomplish each of those tasks. Then, think back through it and see what parts of it can be done in a half-hour. If it'll take 12 hours total, it'll take 24 half-hour chunks. However, nothing is stopping us from clumping them together in a series of shorter blocks. By thinking of them in half-hour chunks we can ask, "How soon will dinner be ready, honey? I'm going out in the shop for a while." And, while doing that, we'll know exactly what piece and what progress can be made during that time.

For those who are computer savvy, each half-hour task on the list can be on a spreadsheet with the time next to each task. It helps to color-code the list with anything yet to be done highlighted in yellow (or red for especially critical actions) and change them to blue, green, or whatever color is preferred when finished.



### THE HALF-HOUR LIST AND FAMILY LIFE

**THE SINGLE MOST** important part of building airplanes is recognizing that the time involved isn't free. It usually comes from our family, and maintaining a happy family is more important than devoting big chunks of time to the airplane. Still, it's not hard, when using the half-hour approach, to weave project progress in between the responsibilities of being a family person. Get up a half-hour earlier. Go to bed a half-hour later. Survey the calendar and identify the times when the family unit has to leave for a soccer game. Or go to a movie. Or leave for a trip. Identifying the important family times on a calendar makes a road map of when it would be possible to disappear for a half-hour and get something done on the airplane. It is surprising how much progress can be made a little at a time. It's the old cliché, "How do you eat an elephant? One bite at a time."





### SHAVING MIRROR NOTES AND PROJECT PLANNING

**BUILDING ANYTHING** — from a bookshelf to a biplane — is essentially an unending mental process of problem-solving. We know where we want to go, but how do we get there? And, when the process is the size of an airplane, it is always alive in our brain as well as in the workshop. We never stop thinking about it. At some sublevel in our thinking processes, our brain is constantly going back to revisit something we were doing in the workshop and what we're going to do next.

The really weird part of the foregoing, nonstop thought processes is that often, with no warning, our brain will suddenly light up with an aha moment where everything having to do with solving a problem or concept is instantly revealed to us. It is similar to the Zen concept of "satori," when we "know" ourselves. Those realizations almost never happen as part of our normal thought process. They just pop out of nowhere, and in some sort of cosmic event, we magically totally understand and solve something that had us perplexed. However — and we've all had those moments — that realization only lasts for a few seconds, and then it's gone. It vanishes, and there's no way we can recall it. It is incredibly frustrating! We know it was there. We know it included some important thoughts. But, we can't retrieve it for love nor money. For that reason, we have to be ready to instantly write these insights down as they happen so we can recall them at a later date.

These moments of clarity usually happen in some inopportune places. Like in the shower. Or when shaving. Or maybe when we're not quite dozing. It usually happens when one's brain is cruising in outer space thinking of something else. Regardless, they have to be captured immediately. That's why some of us have a scuba diver slate and a pencil hanging in the shower (this is not a joke; it's a real and useful application of the tool). Or, more likely, we have a pad of sticky notes and a pen in the corner of the bathroom vanity to be used while shaving. Or on the workbench. Or to the side of our computer keyboard or nightstand. At the very least, a ballpoint pen is always clipped to our shirt ready to scribble a short note on the palm of our hand (the original Palm Pilot — blue ink works better). Of course, it can also be dictated to a notes app on our phone, but for many of us, it has to be visual to stay in our brains. Hence the blizzard of sticky notes following us from day to day.

Incidentally, a useful function of the bathroom mirror is to make a sticky note for each half-hour function. Stick them down the side of the mirror so that when shaving or casually glancing at those notes, it's easy to reorder them into a more logical sequence or add something to them.

Don't laugh. This stuff actually works!

### IN-PROCESS DELAY PLANNING

**AS PART OF THE AIRPLANE**-building process, there are always steps that take the project out of our hands until they complete their own natural cycle — like glue and paint drying, waiting for a part to arrive via Amazon, waiting for a weld to cool, etc. Those may be best done at the beginning part of a half-hour build cycle. Then, we can be doing something else while they are drying, cooling, etc. Or they can be done at the end of a build cycle and left to do their thing until we're ready to start work again. Regardless, we know sitting around watching paint dry isn't going to produce any progress. Even we slow learners know that.

### DO IT WHEN IT CROSSES YOUR MIND

**FOR THOSE OF US** with memories the size of fleas, it is usually productive if we do something the instant it crosses our mind. Don't put it off. Oftentimes these are small victories like putting away the tools we used last night. Or calling so-and-so to set a meet time for helping carry the engine in. Or setting the last five rivets. Or bringing in the glue bottle so it doesn't freeze. It's important to do it when we think of it. Don't put it off or it may not get done.

### BUY IT WHEN IT CROSSES YOUR MIND

**REAL AGGRAVATION** is getting ready to do something and finding you don't have enough washers, or welding rods, or primer, or whatever. The entire time, we knew we would have a need for that material in the near future but kept putting off ordering it until it was more convenient. The most convenient time to invest three minutes in ordering a part or supply is right now. Not five minutes from now. Not this evening. Do it now and avoid aggravation later. Designate a section of the shop for filing away "kits" of supplies, components, and parts for that rainy day when we finally get around to using them.

### THE LIST IS UNENDING

**THERE IS NO LIMIT** to the little inspiration aids and hints that are out there to help those of us who are directionally challenged find our way. The foregoing list is just to get us all kick-started. If you come up with a great organizing idea for us, write it down so you don't forget it. Then, pass it along to the rest of us. We need all the help we can get! **EAA**

**Budd Davisson**, EAA 22483, is an aeronautical engineer, has flown more than 300 different types, and has published four books and more than 4,000 articles. He is the editor-in-chief of *Flight Journal* magazine and a flight instructor primarily in Pitts/tailwheel aircraft. Visit him on [www.AirBum.com](http://www.AirBum.com).